CLAIMS

1. Method for the prevention or retarding of staling during the baking process of bakery products which comprises the step of adding a sufficiently effective amount of at least one intermediate thermostable and/or thermostable serine protease in said bakery products.

2. Method according to claim 1, characterised in that the intermediate thermostable and/or thermostable serine protease has a temperature activity optimum higher than 60°C , preferably higher than 70°C and more preferably higher than 75°C.

3. Method according to the claim 1 or 2, characterised in that the ratio between the protease activity at optimum temperature and the protease activity at 25°C is higher than 10, preferably higher than 15.

4. Method according to any one of the preceding claims, characterised in that the intermediate thermostable and/or thermostable serine protease is obtained by extraction from naturally-occurring eukaryotic or prokaryotic organisms, by synthesis or by genetic engineering.

5. Method according to any of the preceding claims, characterised in that the intermediate thermostable and/or thermostable serine protease is a neutral protease or more preferably an alkaline protease.

6. Method according to any of the preceding claims, characterised in that said protease is selected from the group consisting of aqualysin I, aqualysin II, thermitase and keratinase.

7. Method according to any of the preceding claims, characterised in that the thermostable serine protease is a Taq protease isolated from *Thermus aquaticus* LMG 8924, a keratinase, isolated from *Bacillus*

licheniformis LMG 7561 and/or a thermitase isolated from *Thermoactinomyces vulgaris*.

8. Method according to any of the preceding claims, further comprising the step of adding another anti-staling additive selected from the group consisting of thermostable α-amylase, β-amylase, intermediate thermostable maltogenic amylase, lipase, glycolsyltransferases, pullulanases and emulsifiers, preferably monoglycerides, diglycerides and/or stearoyllactylates.

9. Method according to any one of the preceding claims, characterised in that the bakery product is selected from the group consisting of bread, soft rolls, bagels, donuts, Danish pastry, hamburger rolls, pizza, pita bread and cakes.

10. Improver for the prevention or retarding of staling during the baking process of bakery products, characterised in that it comprises at least one intermediate thermostable or thermostable serine protease.

11. Improver as in claim 10, characterised in that the protease has a temperature activity optimum higher than 60°C, preferably higher than 70°C and more preferably higher than 75°C.

12. Improver as in claim 10 or 11, characterised in that the ratio between the protease activity at optimum temperature and the protease activity at 25°C is higher than 10, preferably higher than 15.

13. Improver as in any of the claims 10 to 12, characterised in that said protease is obtained by extraction from naturally occurring eukaryotic or prokaryotic organisms, by synthesis or by genetic engineering

14. Improver as in any of the claims 10 to 13, characterised in that said protease is a Taq protease, a keratinase and/or a thermitase.

15. Improver as in any of the claims 10 to 14, characterised in that said protease is selected from the group consisting of aqualysin I, aqualysin II, keratinase and thermitase.

16. Improver according to any of the claims 10 to 15, characterised in that the thermostable serine protease is a Taq protease isolated from *Thermus aquaticus* LMG 8924, a keratinase isolated from *Bacillus licheniformis* LMG 7561 and/or a thermitase isolated from *Thermoactinomyces vulgaris*.

17. Improver as in any of the claims 10 to 16, characterised in that it further comprises another anti-staling additive selected from the group consisting of thermostable α-amylase, β-amylase, intermediate thermostable maltogenic amylase, lipase, glycolsyltransferases, pullulanases and emulsifiers, preferably monoglycerides, diglycerides and/or stearoyllactylates.

18. Improver as in any of the claims 10 to 17, characterised in that said improver is a bread improver.

19. Use of a keratinase in food applications.

20. Use of a keratinase in the baking process of bakery products.

21. Use as in claim 19 or 20 wherein said keratinase is an intermediate thermostable and/or thermostable serine-protease.

22. Use according to claim 21, characterised in that said keratinase is isolated from *Bacillus licheniformis* LMG 7561.